Hyperfine Interactions 1990 vol.60 N1-4, pages 687-690

Quadrupole interactions in metals and alloys

Fazleyev N.
Kazan Federal University, 420008, Kremlevskaya 18, Kazan, Russia

Abstract

The contributions of the perturbed charge density of conduction electrons due to quadrupole moments of impurity paramagnetic ions and nuclei to the electric field gradient at the nuclei in metals and alloys are analyzed. The indirect multipole interactions of nuclei in metals via the mediation of conduction electrons is investigated. The influence of these interactions on the NMR parameters is studied.

http://dx.doi.org/10.1007/BF02399846